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ON THE TREATMENT OF DELIRIUM TREMENS.

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[THE article from which the following extract is taken, is published in the June number of the Edinburgh Monthly Journal of Medical Science. The first part of it is devoted to the pathology of the disease. Dr. P.'s views on this point may be gathered from the first paragraph which follows. The rest of our quotation refers exclusively to the treatment.]

To me it is apparent, that habitual excess in the use of stimuli is alike the exciting and the predisposing cause of delirium tremens; and that if a suspension or diminution of habitual supplies be at any time attended by symptoms of the disease, these are not to be regarded as resulting from change in the quantity consumed, but as occurring in spite of such change, and because the peculiar constitutional effect has already been induced, and the premonitory stage of the affection already begun. I am persuaded, that every practitioner who has seen much of this disease must, on an impartial review and consideration of his cases, confirm this remark. For my own part I can affirm, that in a very considerable number of instances the patients were drinking freely up to the period when the disease was developed, there being no interval, and no diminution of quantity; and in those instances—which, I admit, have been frequent—where there really was some diminution from the amount of previous supplies, it was on account of the system having already been brought into the condition of alcoholism, and a less quantity now produced a greater or equal effect, compared with that of the larger quantity taken formerly. There are, I admit, in some instances, an entire cessation from the use of stimuli, or very nearly so, at the time when the symptoms of delirium are in the course of development, but this is because no more can be taken by such individuals—they are already saturated, as it were, with the alcoholic poison.

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As regards the treatment of delirium tremens on the views which I have endeavored to unfold, I may plead the experience of upwards of fifteen years; and state, that during five previous years I also had ample opportunities of witnessing the practice of others, and of personally testing the merits of the mode of treatment then, and still ordinarily pursued. In the earlier period of practice the observations were made al-

most entirely in connection with hospital and dispensary attendance, affording a great many examples of the disease in its pure and in its complicated forms, as occurring among tavern keepers, brewers, butchers, and the lowest order of dram-drinkers generally; latterly the instances have been mostly among a better class of society, yet the disease presenting the same features, and originating from the same degrading cause. The frequent sudden fatalities which I witnessed from arachnitis, convulsions and coma, when stimulants and opiates were freely administered; and the length of time ere recovery took place, even in the most favorable instances of the malady, when these agents were given more sparingly and cautiously, long since convinced me that their tendency is highly dangerous. I do not say that I never would give a stimulant in delirium tremens. It may possibly happen, although I have never met with such a case, that in the advanced stage of the affection the pulse may begin to falter, the heart lose its usual rhythm, the surface of the body to become of a leaden hue, the tremors to disappear, and subsultus tendinum occur, and delirium of a muttering character only continue, when I should certainly say that the flagging powers of life would require to be sustained by some diffusible stimulus. Here there would be no alternative. Then, again, I would not hesitate to give an allowance of his usual stimulus to a habitual drunkard when affected with a wound or ulcer to obtain a healthy action therein, or to administer stimuli of one kind or another freely in ordinary fever, or in the typhoid state of traumatic delirium, so that his circulation may be enabled to keep up the functions of organic life until food could be made use of. This would only be using legitimate means to maintain his ordinary condition of body; but it is quite another thing to prescribe alcohol when the individual is already manifestly in a state of alcoholic poisoning.

From all that I have seen and read, I believe that the combination of stimuli with opiates is a most hazardous practice in the treatment of delirium tremens; for while the former increases the determination of blood to the head, the latter is apt to occasion engorgement there, and thus, I have no doubt, they are the joint cause of many sudden deaths, and of many incurable palsies of body and mind—indeed of the great proportion of those casualties which take place, and for which the disease, and not the treatment, is blamed.

Opium given alone in delirium tremens is, I am aware, almost universally considered by the profession to be quite an indispensable agent—the *sine qua non*—for securing what is called the critical sleep; and hence it is prescribed in smaller or larger doses in as routine a manner as sulphur is for the itch, or colchicum for gout. Notwithstanding this high estimation of its value, however, I hesitate not to say that I consider it a very doubtful remedy, even in the most promising cases of the disease, and a most dangerous one in others. It is well known that a moderate dose of opium in delirium tremens, so far as regards its action on the brain and nervous system, is in the first instance exciting and preventive of sleep. I have frequently seen such doses as in other affections would have been considered very large, in this greatly increase the agitation and excitement after each successive administration; and al-

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though sleep was secured at times, it was but short and disturbed, and followed by delirium as violent as before. Besides, the most unmanageable cases of delirium tremens which are met with, are those affecting opium or morphia eaters, who appear to be extremely liable to this disease if they indulge in spirituous liquors. From the use of opium or morphia alone, as I have already stated, I believe that true delirium tremens never occurs; but with the unfortunate slaves of this debasing habit, a very short course of intemperance is sufficient to develop it. I have also remarked in several of these instances, that if, during the attack the usual dose of the narcotic is taken under the impression that it would soothe the distress and procure sleep, more especially if that dose be morphia—which is apparently much more stimulating in this affection than opium—the paroxysm is greatly aggravated. It is evident, then, that if opium is to be used at all in delirium tremens, it must be given in a large dose (in from two to three or more grains, and repeated at intervals of a few hours); and it is thus generally given, the object being to overstep the stage of excitement, and force on the desired sleep. Now the acknowledged effect of a large opiate on the encephalon is to occasion engorgement of the vessels, more especially of the veins, and consequently, the larger the dose, the greater will be the amount of sanguineous compression of the brain. What, then, must be the probable result in a disease in which there is already, if not an approach to arachnitis, at least a very excited action of the meninges, and a preternatural loading of the vessels generally? The cerebral functions are oppressed, and at length overwhelmed, and sub-arachnoid effusion is the result. The symptoms attending this untoward event are characteristic. Sleep is obtained, but it goes on deepening, and, as it becomes more profound, the pulse becomes smaller and less frequent, the surface of the body covered with a cold sweat, the face pale, the pupils contracted, the breathing slow and soft (although sometimes stertorous). An epileptic fit may now occur and terminate the scene, or the powers of life gradually become more and more depressed, and the victim perish as if in a profound and gentle sleep. Now this progress and catastrophe, although viewed as evidence of an unmanageable—a malignant form of the disease, in a bad subject, is nothing more than the common course and result of injudicious management. Even Graves, who prescribed opium in delirium tremens in the manner I will afterwards notice, warns emphatically against its premature and incautious use.

"Opium," he says, "if given in the beginning, will increase the congestion and bring on sub-arachnoid effusion. I treated a case of delirium tremens in this way too boldly, and the man died of sub-arachnoid effusion; it was a lesson to me, and I advise you to profit by my experience."

I am convinced that it is in this way very many of the sudden deaths we hear of in delirium tremens occur. I saw it frequently in early practice, and have seen it occasionally since in the practice of others; and I am persuaded that any practitioner who has been accustomed frequently to treat this affection with large doses of opium, will be able, on reflection, to explain his want of success, and the occurrence of casual

ties. When, in fact, recovery takes place after a long sleep forced on by a large opiate, it is simply from the wonderful conservative power of nature resisting the evil influence of the agent, just as some will recover from a severe apoplexy or palsy. The practice is one of the utmost hazard. If death were the certain alternative in delirium tremens should sleep not be early obtained—for it is said that “the patient must sleep or die”—there might be some reason in attempting to force on the sleep by opiates. This, however, is certainly not the case, and consequently such interference is not only uncalled for but most improper, when there is danger to be apprehended from the practice. Sleep occurs as the natural, the favorable crisis, or rather termination of the disease; for it is not to be viewed as a part of the affection, or in the same light as we are accustomed to regard a critical sweat or other discharge. It is the result and proof of an improved condition of the brain and nervous system—a salutary relaxation succeeding a state of dangerous tension. It will take place in the mild but genuine forms of the affection at the proper period, which, as I have already remarked, is on the second or third day, when the paroxysm has run its course, when the peculiar erythsm, the “nervous irritability,” is brought to an end, and a condition of “exhausted nervous power” now truly produced. That this may likewise happen in severe examples of the disease, although no opiate of any kind is given, the cases with which I shall close the present paper [omitted in this Journal] will prove; and while I am convinced that the plan of treatment now to be recommended will be found the most efficacious, I have no hesitation in saying that in a larger proportion of instances sleep would take place spontaneously at an earlier period, and the subsequent condition of the patient be much more sound and safe, by doing nothing at all, than by the use of opiates. I have seen very decided cases of the disease recover well when a mere placebo was given with a view to keep up the appearance to friends of something being done, and prevent them from using as remedies things which would be hurtful. Dr. Ware, of Boston, in an excellent memoir on delirium tremens, strongly advocates from experience the do-nothing plan of treatment. Among other things, he says of opium:—

“In the cases which I have formerly treated with opium, and which have at last terminated well, a salutary sleep has not taken place till the close of the third day, let the quantity of opium be what it would. I have, indeed, seen sleep induced by opium at an earlier period, but it was premature, it passed into a state of coma, and the patient died. I am satisfied, therefore, that in cases of delirium tremens, the patient, so far as the paroxysm alone is concerned, should be left to the resources of his own system, particularly that no attempt should be made to force sleep by any of the remedies which are usually supposed to have that tendency, more particularly that this should not be attempted by the use of opium.”

Dr. Cahill also cites several cases of the genuine disease, in which he found opiates decidedly injurious, and treatment without them salutary.

The treatment recommended by Dr. Graves, to which I have already referred, is advocated on the ground that opium is highly dangerous in

the early part of the paroxysm. His rule of practice is to begin with tartar emetic alone, with the view of combating vascular excitement, then to add a little opium, and gradually to increase the quantity, keeping its action carefully guarded and controlled by the antimony, until at last, when engorgement of the cerebral vessels is no longer to be apprehended, to use opium alone. If opium is to be given at all in delirium tremens, this is certainly the safest mode of prescription. For some time I tried it, but from considerable previous experience of the beneficial effects of antimony in this disease,* I soon became convinced that it was from that agent solely, especially its effects in the first stage, that ultimate benefit was derived; that the relative quantity of opium employed at first is too small† to counteract the power of the antimony, or to produce any notable effect whatever; that in ordinary cases, ere the time arrives for increasing much the amount of the opium, the affection has run, or nearly so, its natural course, and the period for the salutary sleep commencing is at hand; and that when a greatly-increased dose is given before this much-wished-for change has arrived, there is a proportional increase of excitement and consequent delay of its occurrence.

From these considerations, I resumed the use of antimony alone; and during the last ten years, I have treated upwards of eighty cases of the genuine disease, many of them very severe ones, with uniform success—not only in regard to the speediness of the immediate recovery, but the comparatively thorough restoration to a healthy condition of body and mind—as much so, at least, as could possibly be expected in individuals, many of whom had been, and were likely soon again to become, habitual drinkers. The dose which I have been accustomed to give has ranged from one quarter to one half of a grain, in simple solution, every two hours, sometimes at shorter intervals, according to the degree of excitement and irritability. The action of the antimony appears to be chiefly sedative. Its direct action is to reduce the vascular excitement of the brain, soothe the nervous system, and diminish muscular power; and its more indirect action is exerted on the functions of the skin, kidneys and intestinal canal. In two or three instances only have I found it necessary to suspend its employment, in consequence of diarrhoea and hemorrhagic discharge from the bowels; and in these cases I substituted digitalis and ipecacuan. with marked benefit; and I do not recollect of ever seeing it produce continued vomiting, although occasionally I have found the first or second dose eject from the stomach a quantity of bile. It is for the sake of its emetic effect that, in Germany and America, it has been prescribed in large oft-repeated doses, even from four to seven grains every hour, and that, too, according to report, with benefit. But although there is, doubtless, extraordinary tolerance of this agent in delirium tremens, I do not think that the use of such, or any other very heroic means, are warranted. Bleedings, large opiates,

* This experience of the effects of tartrate of antimony I had before I was aware that Dr. Graves had recommended it with opium, or that Stoll, Goden, Klapp and others, had advised it in emetic doses.

† Dr. Graves's formula for first use is:—R. Antimon. tart., gr. iv.; tinct. opii, dr. j.; aque, oz. viij. Signa. A tablespoonful to be taken every second hour. There is thus in each dose only five drops of laudanum to one fourth of a grain of antimony.

or large doses of tartar emetic, are all, although certainly not equally, unsafe, and therefore to be deprecated. An antimonial course of treatment in moderation, and with the design I have indicated, gently diminishes excited action, induces weariness of muscle, general nervous exhaustion, and mental languor. It thus removes all hindrances to the occurrence of the salutary sleep. It prepares the way for it, not by forcing, but by favoring it; and when the individual, exhausted, seeks his couch, and finds repose, that goes on, not as a drugged sleep, but as a purely natural and profound repose, from which he awakes with restored reason and muscular control.

Although I have recommended the tartrate of antimony as a chief remedy in delirium tremens, there are several other means essential to its successful treatment. In the department of medicinal agents, however, I have only further to suggest, that, should the bowels not be moved by the antimony, the compound powder of jalap (3j.) will generally be found speedy and efficacious. The other means of cure belong strictly to regimen and diet; and the first of these in importance is bodily freedom. Nothing is more hurtful in delirium tremens than the restraint, particularly that of the strait-waistcoat. I have seen instances, and heard of many more, where I have no doubt the cerebral excitement was so increased by the never-ceasing struggle for liberty, that fatal convulsions at last afforded release. All the control required is the presence of one or two judicious attendants, who will humor the patient in his whims and fancies; who will speak and act regarding them so as to assure him of safety, and to relieve him of apprehension, which is the most characteristic feature of the delirium; and who will mildly but firmly interpose, if he attempts anything which may accidentally prove injurious to himself or others. Of course injury inflicted wrathfully or vindictively is not to be anticipated, for rage, violence or outrage, do not occur in this remarkable disease, but only in that affection which I have already briefly noticed, and with which it is sometimes confounded, namely, the madness of drink. Hence the frequent accounts met with in the public prints, of homicidal, suicidal, and other violent acts, said to be perpetrated during fits of delirium tremens, originate in an entire misapprehension of the nature of the two diseases. The apartment, however, in which the delirium tremens patient is confined, should be well secured, for he may rush out at the door, or jump out of the window, in the fright and frenzy of supposed danger. The larger, too, the room is, so much the better, that he may have ample space to advance and retreat, according as he wishes to scrutinize or avoid a suspicious or distressing object of his fancy; to arrange and re-arrange articles of furniture; or to carry on, after a fashion, the duties of some bustling occupation. All this expenditure of muscular effort, without any restraint, aids greatly the antimony in producing a safe kind and amount of physical and mental exhaustion, from which the patient, languid and worn out, at last lies down voluntarily, and falls into the much-desired sleep. It is thus, too, that the "walking drill," according to Dr. Blake's experience in the West Indies, was found efficacious in warding off attacks of delirium tremens in the case of drunken soldiers; not, however, as

supposed, from the exercise proving a new stimulus in place of the rum, to which they had no access, but from its wearing-out effect, while the proper nutrition of the body was maintained. No one would ever think of ordering continued and monotonous hard work, and muscular fatigue, for an affection of "exhausted nervous power."

During the entire paroxysm of the attack, it is of some consequence to afford the patient abundance of light; not, however, as supposed by Dr. Blake, for its stimulant or excitant effect, but for its aid in correcting false optical impressions. The excited brain is very apt to receive erroneous impressions, from the appearance of surrounding objects, if there is an uncertain light. Hence the exaggeration of many of those agitating and terrifying illusions and phantasms which more distinct vision would prevent or quickly dispel. During the daytime, therefore, there should be no half-closed shutters, nor half-drawn blinds or curtains, but advantage taken of the clearest light available; and during the evening or night, the more distinct the artificial light is, so much the better. Perhaps perfect darkness may serve the purpose equally well; but this can be available only in the well-padded chamber of a lunatic asylum; and besides, in private practice, the other parts of the plan of treatment here recommended, which require the presence of an attendant to regulate the doses of antimony, or other sedative, and to administer, from time to time, suitable nourishment, could not be carried on without the admission of light. This leads me to remark, in conclusion, that during the administration of the tartar-emetic, I give, at intervals of a few hours, a moderate quantity of good beef-tea, mutton broth, or chicken soup, and sometimes *café au lait*, with the white of an egg switched up with it. Thus, while the vascular action in the brain is being subdued, and the nervous system liberated from the presence of the alcoholic poison, the functions of organic life are sustained, and a better ultimate recovery is secured.

ON THE USE OF CHLOROFORM OINTMENT IN RIGIDITY OF THE OS UTERI.

BY G. W. RONALD, M.D., PHYSICIAN TO THE LOUISVILLE ALMS-HOUSE.

THERE are, with few exceptions, no accidents to which the parturient woman is subject that inflict upon her a greater amount of suffering than obstinate rigidity of the os uteri. It not unfrequently baffles the skill of the oldest and most experienced practitioner for a long time; and were we to judge from the pain dependent upon this condition of the organ, we should very readily suppose that the life of our patient was in the most imminent danger. This state of affairs, as compared with the number of births, is fortunately of rare occurrence; yet it is of sufficient frequency to make the subject one of considerable interest and importance in practice. Various causes have been assigned, by different authors, for rigidity of the os uteri; some attributing it to mechanical contrivances used for supporting the organ, others to the injudicious use of escharotics, whilst others again contend that morbid irritability is the prin-

cial cause, and this last conclusion seems to me more rational than either of the others. It is not my intention, however, to enter into an inquiry as to the cause of the difficulty ; but to call the attention of the profession to the use of chloroform ointment, as I have found it the most expeditious, reliable, and safe mode of overcoming it. I do not pretend to say that it is a specific, for my limited experience in its use would not justify such a conclusion, having used it in but a few instances, but in these, with the most gratifying results. The first time that I made a trial of it was in the Louisville Alms-house, on the 28th day of January, 1852.

Mrs. C., aged 23, a seamstress, was admitted on the 25th, reputed to be of respectable family, full and plethoric habits, nine months advanced in pregnancy with her first child. She was complaining of pain in the left side—considerable œdema of the lower extremities—bowels constipated, for which oil had been repeatedly taken, urine highly colored and scanty. Ordered a Seidlitz powder to be given, and as soon as it operated to be followed with a teaspoonful of sweet spirits of nitre every two hours. At 7 o'clock on the morning of the 28th, she was taken in labor. I saw her at 10 o'clock. Upon making an examination, the os uteri was sufficiently dilated to ascertain a head presentation, though the membranes were not ruptured. The pains were powerful and strong, continued to return at short and regular intervals, and I consoled myself with the thought that I should be detained but a short time, yet hour after hour passed and still the os uteri had made no perceptible progress towards dilatation. The woman had become restless and despondent, intense thirst, sickness at the stomach with constant retching, throwing off the water almost as soon as swallowed. If the os uteri was touched she complained of pain, it was hot and unusually rigid, feeling as if a tight band or cord had been drawn around the neck of the organ, which was resisting and unyielding. Having waited upon nature to overcome the difficulty until the patience of the woman, as well as of her attendants, was completely exhausted, I determined to resort to some of the remedies usually recommended. Accordingly the arm was tied, and blood abstracted to approaching syncope. Tartrate of antimony, and the warm bath, all in their turn were brought into requisition ; yet the condition of the organ had changed but little, though the membranes at this time had given way and discharged a portion of liquor amnii. These means having failed to procure the desired effect, I went to the office for the purpose of making an ointment of belladonna, but was disappointed in finding none in the house. When I was in the act of sending to town for the article, it occurred to me that the ointment of chloroform might as readily relieve rigidity of the os uteri, as contraction of the muscles of the extremities, which I had often seen it do, having had it applied to my own person in an attack of cholera, by my friend and preceptor, Dr. T. S. Bell. Taking this view of the subject, I determined to try it, though not without some doubts and apprehensions, for I knew not what effect it might have upon the child, or upon the hot and irritable os uteri. The ointment was prepared by taking one drachm and a half of chloroform and thoroughly incorporating it with

one ounce of simple cerate; which was freely applied principally upon the external surface of the neck of the organ. At the time of the application the woman complained of slight smarting pain, which passed off in the course of a few minutes, and had it been applied at the commencement, or during contraction of the organ, she would have made no complaint, as was fully proved in the subsequent cases in which I used it. Upon making an examination, twenty-five minutes after the application of the ointment, I was surprised to find the os uteri dilating rapidly, soft and pliant; and in one hour and twenty-seven minutes after its first application the woman was delivered of a fine, robust and healthy boy.

I am well aware that any manual interference on the part of the practitioner, in order to terminate protracted or lingering labor, is condemned by some of the ancient writers upon obstetrics. Dr. Blundell, in his valuable and scientific work, reminds us in every chapter that "meddlesome midwifery is bad." This I suppose no one will doubt. But surely no well-informed physician in this age of improvement and advancement, both in the arts and sciences, when everything seems to be moving on with almost telegraphic speed, will condemn the use of any remedy that we may have at our disposal for shortening the pangs of one of the most painful processes in the parturient woman.—*Western Journal of Medicine and Surgery*.

AN EXAMINATION OF THE DOCTRINE OF SELF-LIMITED DISEASES.

[Continued from page 204.]

WHEN, "in the good time coming," medicine shall have become an exact science, and its practitioners the diligent students of those great laws whereby the vital forces are governed—whether in health or in disease—rather than the living remembrancers of the dogmas of the past, the doctrine of the self-limitation of disease will, in our opinion, with many other equally untenable fallacies, be found only in those ponderous tomes which, whilst they may furnish evidence of industry, will also furnish equal evidence of industry misdirected, and of hypotheses at once irrational and dangerous.

Fully convinced of the untenability of the doctrine of self-limitation of disease, at least in so far as it is made to include the diseases we have already noticed, and those we propose yet to examine, we proceed to the question—Is asthma a self-limited disease? or, in other words, "can it be arrested in its course by any medicinal agent" or mode of treatment?

What is asthma? The authorities tell us that "asthma is marked by a characteristic *spasmodic* difficulty of breathing," the spasm being mainly confined to the respiratory apparatus situated below the trachea, and seldom complicated with any organic change of structure. True, asthma is readily recognized by severe constriction of the chest, with loud and wheezing respiration, to which is conjoined a short, sharp, difficult cough.

What is the mode of access of this very troublesome disorder? We reply, the attacks most commonly occur during the night, and at the time when the life forces have fallen to their minimum point, from 12 to 2 o'clock. The patient awakes with a distressing sense of suffocation, and often rushes to the window for air. The paroxysm is nightly repeated, or, in the language of Wood, "this alternation of exacerbation at night and remission in the day, is repeated for several days," inducing the patient to sit up until after the attack. Can this periodic repetition of the asthmatic paroxysm be averted, and thereby *the cause* of the disease be arrested? If it can, then it necessarily follows that asthma must no longer be looked upon as a self-limited disease.

That the paroxysms of asthma can be arrested, *cut short*, and their repetition be averted, or prevented, and that the course of the disease may be thus limited by the physician, instead of by the recuperative powers, thereby proving its non-self-limitation, we are abundantly assured. We have seen that its paroxysmal and periodic repetitive character is admitted by the authorities—that the patient is comfortable during the day, is well known—that the paroxysms occur in the night, and when the life forces have *sunk to their minimum point*, is also matter of authoritative recognition. Now would it not be more in accordance with the teachings of a sound philosophy, to avert the paroxysmal attack, rather than to allow the paroxysm to be repeated night after night "for several days," by effecting and maintaining an equilibrium of action and resistance in the muscular apparatus involved in a fit of the asthma? or, in other words, to supply to the recuperative powers that aid which will enable them to perfect the *remission* of the day into *intermission*? That these results are attainable—that we have it in our power thus to avert the repetitive asthmatic paroxysm, we have again and again practically demonstrated; results in almost every case within the reach of the practitioner, who, instead of viewing the disease through the false lens of "self-limited diseases," will look at it through the true glass of paroxysm and remission. By striking the proper blow in the onset, the disease is at once not only rendered manageable, but its duration is curtailed. To strike the effectual blow *when it is needed*, and thereby avert the nightly and distressing paroxysm of this most annoying and perplexing disease, is, indeed, "the highest point of professional excellence"; a point to which, we trust, every intelligent member of the profession will soon attain.

We must next pass gout under review, and endeavor to ascertain, as the result of our examination, whether it is a self-limited disease, or a disease controllable by medical skill.

Say the authorities, the attacks of gout are periodically repeated, and they are therefore paroxysmal and intermittent. They may arise from hereditary predisposition, or be induced by intemperance and high living.

What is gout? Upon this point the authorities are greatly divided, scarcely any two of them maintaining the same opinion. The great Holland is here a *humoralist*, asserting, with some other authors, that it is "a morbid ingredient in the blood." In proof of this hypothesis, we are referred to an increased secretion of uric acid, lateritious sediments in

the urine, and depositions of the same, as urate of soda, in or about the joints. And yet *uric acid is secreted and excreted* in largely-increased quantities, in many forms of disorder in which there is not the least trace of gout. The late Dr. Chapman, and some other authors, refer gout to some disease of the digestive apparatus.

What are the facts elicited in the actual development of the disorder? The attack, says the patient, was preceded by "taking too much wine—or by getting wet—or by exposure to the east wind"—or by mental excitement, the result of some domestic difficulty, or social or political squabble; whilst Drs. Paris and Darwin assert that the paroxysm of gout has been frequently induced by loss of blood, or by an active purge.

The characteristic enlargement of the joints which marks the fit of gout, is only the local development of a great constitutional wrong; whilst the periodic repetitions of the paroxysm proclaim the great truth that the recuperative powers demand some added force to enable them to maintain an equilibrium between action and resistance; for, in the language of Liebig, "a complete cure of disease occurs, when external action and resistance are brought into equilibrium."

That gout is not a disease of self-limitation is abundantly proven by the admission of the most distinguished authorities; for Watson and other authors cite numerous cases wherein it has been *immediately cured* by an intense mental excitement. Nor can a poison, a "morbid ingredient in the blood" (to be eliminated, or depurated, before the disease can be cured), be the *cause* of gout, although an excess of lithic acid may be one of the incidentals of that modification of disordered action; for what becomes of this "morbid ingredient," when a fit of the gout is cured, *instantly*, by a passion, as in the cases cited by Watson and others? By what sudden explosion is it driven from the circulation, and where its outlet? How does the *momentary* passion eliminate from the blood the assumed "morbid ingredient" upon which the disease is said to depend for its perpetuation?

Lithic acid, or any other excessive secretion, is the result (not the cause) of a previous, and in most cases of a long-continued constitutional disturbance of the totality of the system; hence gout, in common with all other paroxysmal disorders, can only be successfully treated through the great nervous centres.

We have already exceeded our usual limit, and shall, for the present, withhold other reflections suggested by the subject under consideration. In our next article, we propose to continue our examination, by the review of diabetes, and probably some other so-called self-limited disease; when we shall attempt to prove the true cause of diabetes, and to sustain our assertion that it is not a disease of self-limitation. JUNIUS.

[To be continued.]

HYDROCEPHALUS.

[Communicated for the Boston Medical and Surgical Journal.]

SOME time ago I contributed for your Journal a short article upon Hydrocephalus, connected with intestinal irritation. Since then my observations

upon this disease have been extended, but have not changed the opinion that in this climate it is seldom found except co-existent with some trouble along the alimentary canal. There are cases, undoubtedly, of congenital dropsy of the brain, and of the malady disconnected with disease of the bowels; the latter arising from an inflammatory condition of the meninges, primarily affected. I remember three varieties of dejections from the bowels that have appeared in cases that have recovered and died under my treatment. One child, 6 months old, a boy with nervous sanguineous temperament, had the usual marked symptoms of the disease, which progressed to beyond the incipient stage of effusion, and then were arrested. I attributed the cause in this case to irritation of the gums in teething, which is productive of greater constitutional disturbance in children of the above temperament. The majority of cases that I have met with appeared in temperaments between the well-defined nervous sanguineous and nervous bilious. Perhaps the hair would be light, and the eyes and skin marking the nervous bilious temperament more. The skins of children that will die of hydrocephalus always present to me a very uniform appearance. I have found them of a cadaverous hue, resembling those of some women who die from 4 to 12 months after parturition, attended with an exsanguinated appearance of the whole surface. There seems to be no approach to a healthy assimilation of food in either case. I have noticed a shiny appearance, as if greased, particularly about the face. The feet are generally extended a little, so that there is sometimes difficulty in flexing them upon the leg. The anterior fontanel is depressed, and the eyes sunken. The hands are thrown up towards the head, and during the period of effusion the patient will move the chin and roll the head upon the pillow.

For the reason that this disease is so often fatal, it will be of most importance to understand the symptoms which commence the malady. I know of none that can be detected sooner than the expression of the patient, which is that of vacancy, strongly depicted in every feature. The eyes have first a peculiarly anxious and imploring look; sometimes they indicate impatience from some cause of suffering which they scarcely seem to hope relief of, and I think unless the symptoms are relieved within 24 hours after this appearance, the eyes take an appearance that may be recognized in those of a corpse. I have noted some symptoms here, as distinguishing the disease as it occurs in this country, and which will nearly correspond with those laid down in the books.

The alvine dejections were in one case, thin and of a chromic yellow color; in one, dark, almost black, resembling sand mixed with venous blood. The other cases had the most frequent characteristics, green and slimy. I regard the latter to indicate a much more intractable state of the mucous membrane.

It is the opinion of a celebrated physician of New York, that small doses of mercury have a powerful effect in limiting the quantity of effusion and causing absorption. I think the case mentioned, with the yellow dejections, was cured with this medicine.

Cases of hydrocephalus are very annoying to the physician. They come upon the most intelligent children, and good condition in life is no

preventive of them. We lost one case recently of this kind, which was a supervention upon measles and some inflammation of the lungs and bronchia. The child was weaned a short time previous to the attack, and had cut all her teeth. Upon looking at statistics, I find the operation of paracentesis to have saved 10 out of 19 cases, in the practice of an English physician by the name of Conquest. He could not have a better name. The operation was repeated upon some of them, and a large quantity of fluid extracted before effusion ceased, but 10 out of 19 recovered. We cannot but be pleased with the man who thus clearly diagnoses and has the courage to save life by this hazardous means. It is the duty of every physician to resort to the operation. I should consider it no great misfortune to come upon me, if half a dozen such cases died under my care five minutes after the introduction of the trocar, if at length I saved one. It is no mean ground for felicitation, for a *man* to say that some useful person, perhaps, is indebted to him for his life, which was retained by a manipulation that was liable to bring only a temporary spot upon his reputation. The laity are now quite well acquainted with some symptoms of this fatal disease, and there is not the risk in performing the operation unsuccessfully that has existed. I have lost a great many children with the disease, and I *know* it is what perplexes every physician in New England. I have resolved to resort to the operation in proper cases for it, and I submit it for the greater consideration of the profession.

Nantucket, June 26th, 1854.

CHARLES BELL.

MEDICINAL USE OF ALCOHOL.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—In the Journal of May 31st is a reply to my remarks upon alcohol as a medicine, by Dr. Hall, of Illinois. The Doctor thinks it "improper to introduce moral subjects for discussion in a periodical devoted to matters of a strictly scientific nature." Does the converse hold true, that it would be *unscientific* to introduce moral or medico-moral subjects? He asks "if it is not the use of alcohol as a beverage and its consequent abuse, and not its medicinal use, that has done the harm." This is precisely the same argument held by the advocates of its use as a beverage. "It is the *abuse*, say they, and not the *use* of the article that causes all the evils attendant." But the *use* cannot be separated from the *abuse*, either as a *beverage* or as *medicine*, more especially as a *domestic medicine*.

Dr. H. should recollect that alcohol is an article *sui generis*; that it bears but little analogy to any other article; that opium, approximating the nearest in its effects, has never in a civilized community caused, but in a slight degree the moral and physical evils chargeable to alcohol, and that while the latter enters almost universally into our medical prescriptions as well as in innumerable condiments, and the former rarely if ever, we cannot prevent the *abuse* of alcohol as a medicine without discarding its use.

The Doctor says truly, "no other agent has been so improperly used

in this country as alcohol"; and I will add there is no other agent in the materia medica that can or is likely to be used so improperly. Dr. Hall would give alcohol to the reformed inebriate if he should deem it proper. I will suppose a case. Dr. H. is called to prescribe for a patient severely ill. The Doctor has a powerful poison which he can administer, not with impunity, but with some prospect of temporary relief. Yet the Doctor is fully aware that if he does give the poison he will excite or continue a latent morbid appetite which the patient has for that poison, and which appetite he has not the moral power to resist, but will ultimately resort to that poison to complete his destruction. Will Dr. H. prescribe the poison unhesitatingly? Or will the Doctor amputate a limb which may give a few minutes relief from pain, with a full knowledge that in a few hours his patient must die?

It is a new doctrine to me, if we are to prescribe temporarily for our patients, regardless of future consequences.

Dr. H. lays down his hypothesis very plainly, that "all medicines in health invariably do harm, but in disease are beneficial." All medicines, then, are specifics, or we are reduced to the theory of nostrum-mongers who say "they can do no harm if they do no good," and we are gravely told by Dr. H. that all medicines not only do no harm in disease, but are beneficial.

I cannot concur with Dr. H. that "all medicines when used in health invariably do harm." Are there not many articles recommended in health as well as disease, which do not do harm—such as garden rhubarb, cranberries, various greens, coffee and tea, milk, &c?

My object in writing, Messrs. Editors, is not hypercriticism, but chiefly to extend discussion upon an important subject affecting physicians and patients; and I think the profession cannot but perceive that while alcoholic prescriptions are so universal, and while it is recommended for a domestic medicine, it will continue to be used as a beverage and its lamentable effects will follow. Why not say, then, "if meat maketh my brother to offend, I will eat no more meat while the world standeth."

Albion, Me., June 26th, 1854.

A. P. FULLER.

ALCOHOL AS A MEDICINE.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—We have been interested and amused with the discussion on the use of alcohol as a medicine going on through your pages. That the use of alcohol as a beverage is pernicious, no sane physician in this nineteenth century denies; but that *because* it is pernicious as a beverage, it should never be used medicinally, is the question now under discussion. The argument that its use should be discarded because it rouses a dormant appetite, would be potent, if true. Admitting that it does in some instances, and that serious injury is done by its administration in the form of tinctures, these cases seem to be only exceptions to the general rule; and does not the argument apply with equal force to the use of opium? How many physicians besides Dr. Gilman

have noticed that the administration of Tinct. Cantharides, Digitalis, Aconite, Blood Root, or any other tincture, has created an appetite for alcoholic beverages in those who have not the habit formed? We confess our observation has been limited; but with an experience of twelve years in the practice of medicine we never remember to have seen or heard of any injury being done by the judicious administration of alcoholic tinctures. As an evaporating lotion, it is beneficial; but of course it should be recommended with caution. It is obvious to every physician that it would be unsafe to use alcohol to any considerable extent in the cure of a reformed inebriate, perhaps even in the form of a tincture. Would it not be equally unsafe to administer morphine, which the Doctor used in his case of delirium tremens? Both are powerful narcotic poisons, and operate in a similar manner. Is there not as much mischief done by the administration of opiates in proportion to the number of cases where it is used, as by alcohol used medicinally? We have no doubt that the use of alcohol as a medicine might be dispensed with. So might opium, calomel and the lancet. But because a man cuts his throat with a razor, are we to dispense with the use of razors? or if suicides are committed by taking opium, is it to be laid aside as too dangerous for use? If alcohol is so dangerous that it cannot be applied as a lotion, it is unsafe to use it as a chemical agent or for manufacturing purposes. The smell and handling it in the manufacture of burning fluid is objectionable, because it may arouse a dormant appetite. Painters should beware of it, and stain with cold water. Fluid manufacturers will find a valuable substitute in cold water. Any quantity of gas may be manufactured from cold water, without the danger of arousing a dormant appetite. And we are not certain that the bite of a rattlesnake might not be cured with cold water; at all events those who are afflicted with the rumphobia are at liberty to try it, and we would suggest as a valuable auxiliary the use of soft soap. It might be a doubtful remedy in the treatment of delirium tremens, for we have heard of patients committing suicide by drowning in cold water. Nevertheless, we go for cold water—"honest water, that never laid a man in the mire"—and not desiring to take up arms against so old a soldier, we knock under, hereby capitulate, and concur with Dr. Gilman in his notions of alcohol as a medicine.

X.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 5, 1854.

Meeting of the Suffolk District Medical Society.—The monthly meeting of this Society, for medical improvement, was held at the Society's rooms in Phillips Place, on the last Saturday evening in June—the President, Dr. Buck, in the chair. It had been previously announced that Dr. Durkee would read a dissertation, but as he had not prepared one, Dr. Dix read a paper on acute inflammation of the lachrymal sac, which he illustrated by two cases that had been under his care for treatment. It was an exceed-

ingly interesting and practical paper upon that rare affection of the appendages of the eye, and we regret that we are not able to give a full report of it. We should be glad to lay it before our readers, and it has been partly promised us for publication.—Dr. G. S. Jones presented some samples of the resinoids and alkaloids of medical plants, prepared at the Chemical Institute, New York, by the Messrs. Keith & Co.; also the little instrument mentioned in last week's Journal, called the "Pillow Drinking Tube," which was favorably received, and its usefulness generally acknowledged. The President announced the receipt of the copy of a report and series of resolutions from the Worcester District Medical Society, which on motion, were received and placed on file.—Dr. Durkee mentioned, that instead of reading a dissertation at the next meeting of the Society, he would exhibit a series of microscopical specimens, embracing all the tissues in the body, commencing at the second month of the embryo, up to adult life, prefacing his exhibition with such remarks as may be considered applicable to the occasion. At 9 1-4 the Society adjourned. It is earnestly hoped that more interest in these monthly meetings of the Society may be manifested by the members, for it must be apparent to every one that great benefit may be obtained from them. Indeed, it is a poor compliment to the member who prepares his dissertation with great care, to have to read it to vacant seats. Such apathy and indifference should not exist; and we hope at the next meeting there may be a full attendance of the members.

Drainage in Towns and Cities.—Nothing is more essential to health, in compact settlements, than a perfect system of sewerage. Cities are just beginning to realize the value of this great fact. Many an epidemic has its origin in the accumulation of nuisances; and few nuisances can be greater, in regard to evil consequences, even in our smaller towns and villages, than the vegetable and animal material held in solution in the drainings from sinks and privies, when allowed to urge its way along the streets or around inhabited buildings. A city may have its mortality augmented by neglecting to conduct the common surface water under ground. In this season of cholera tendency, the existence of which will not be denied by physicians, the selectmen of our towns, health officers, magistrates and police forces, should be indefatigable in abating not only every actual nuisance, but those minor deviations from a state of perfect cleanliness which at other times might pass unnoticed with impunity.

"On the Treatment of the Agony."—The "*Bulletin Général de Thérapeutique*" contains an able and interesting paper, by Professor Forget, of Strasburg, on the treatment of the agony, which, etymologically, signifies combat, and by application, according to Dr. Johnson, "the last contest between life and death." If our space would admit of it, we should be pleased to publish the entire paper. As it is, we can only furnish a few extracts. Prof. F. commences with the following admonition to the physician. "Never," he says, "despair of a patient while he gives sign of life! If all practitioners were persuaded of the importance of this precept, they would find themselves less frequently deceived in their fatal prognostics; they would less frequently experience the embarrassment of, so to speak, seeing the patients revive whom they had consigned to impending death; while ignorance and charlatanism would more rarely reap credit at the expense of science, by restoring life and health to those who were deserted, as it is called,

by the physician." Prof. F. makes this applicable to all acute and chronic diseases actually in a state of evolution, wherein the issue is almost constantly fatal. He cites, for example, convulsive attacks in children, which, notwithstanding the grave symptoms they present, such as cerebral fever, &c., quickly get well. The different modes of dying, as described by Bichat, Barthez, and Broussais, are taken up in detail, and in conclusion, the author describes three species of "agony":—first, "by defect of innervation; second, by defect of circulation; and third, by defect of respiration." * * * "In fine," he says, "the hippocratic face; paleness; lividity of the skin and mucous membranes; half-closed eyelids; convulsed eyeballs; muscular prostration; diminution of the general sensibility, of the special senses, and of the intellectual faculties; coldness of the extremities; characteristic sweats; labored, stertorous respiration; small, irregular, soft, slow, or frequent intermittent pulse; difficult or absent deglutition,—such is the group of symptoms which can leave no doubt as to the imminence of death. But even when hope has forsaken him, the physician ought to feel it to be a sacred obligation to act so long as a breath of life remains, and even, in certain cases, when life appears to be completely extinct, as in syncope, asphyxia, lethargy, &c." The general principles of treatment of the "agony" are given, illustrated by cases—which fully demonstrate the correctness of the position taken on this subject by Prof. F., as the lives of some of his patients were saved, or prolonged for days, and months—when they were considered *in extreme*. We will close by quoting the following from Prof. F., which he gives as the common expression of the friends or relatives of very sick patients:—"What is the use of tormenting poor dying people?" * * * "In the first place, it is not proved that dying people are very sensible to pain; then we have just shown that these tortures may be good for something; lastly, ask the unhappy being who is suffocating, and who feels himself dying, what he thinks of your sentimental philanthropy? But, beyond all these professional considerations, there is something positive, something glorious for science, and happy for humanity, in the consciousness, based on facts both numerous and authentic, that we may succeed."

Connecticut Retreat for the Insane.—Say what they may of the Blue-law State in regard to the alleged postponement of Thanksgiving in former times, on account of the scarcity of molasses; the voting for Governor Trumbull twelve years after his death, and the whipping of beer barrels for working on Sunday—Connecticut is a noble Commonwealth. Its institutions are among the best in the United States, whether they relate to education, religion or humanity. They are sound to the core—and improve with each advancing year. The people, it is true, abhor a theatre at home, but they are renowned patrons of the stage wherever they go, and spend their money freely abroad for amusements which are considered exceedingly sinful within their own territorial limits. In the solid business, however, of bettering the condition of man, and in really and permanently ameliorating the misfortunes of the afflicted, Connecticut is always foremost. The colleges at New Haven, Hartford and Middletown; the Institution for the Deaf and Dumb; and lastly, the Retreat for the Insane at Hartford, are monuments of her active benevolence. The thirteenth annual report of the latter, indicates its continued prosperity and usefulness. Expenses the last fiscal year, ending April 1st, \$33,622 39; while the income was \$48,227 62. Whole number of patients in the year, 347. Highest number at any one period, 197; the lowest, 158. Average number under medical supervision, 180.

Males in the same time, 154—females, 193. In nearly all the hospitals for lunatics, the female patients predominate. Of the 161 discharged, 64 had recovered; 33 were not improved, and 22 died. John S. Butler, M.D., at the head of the Retreat, has established a firm reputation, and fully meets the expectation of those who are most familiar with his rare attainments in the management of mental maladies. His report, the present season, is a long document—quite a treatise, and abounding in sound, practical, common-sense observations relating to the treatment of diseases of the mind. We recommend it to the critical examination of the law-makers of Connecticut; to those among them—if any such there are—who object to doing any thing for those who can do nothing for themselves, or who love money more than mercy.

Boston Lunatic Hospital.—The City Council made their annual visit of inspection to this institution on the afternoon of Wednesday last, by invitation of the overseers. It was a painful sight to see so many individuals deprived of the greatest gift which God has given us. It is gratifying to know, however, that these unfortunate patients receive from the hands of the able and accomplished superintendent, Dr. Walker, the kindest and most skilful treatment. There are some 260 under his charge; indeed, the Hospital is full to overflowing, and additional accommodations are required. The City Council have already made an appropriation for the erection of another wing to the building. Although it has been the custom for the City Government and the heads of the several departments to make these annual visits, yet we doubt the necessity or expediency of such a large body visiting the patients in one day, or at one time, as it is apparent the poor patients become very much excited by the novelty of such a rush of strangers, and it has a decided tendency to retard the curative process. It really makes the place for the time being a bedlam indeed, as was particularly noticed in the actions of the patients at this visit. We hope the overseers will in future confine their invitations to small delegations, and not have the whole city government at once. There were many interesting cases noticed, but there was one of idiocy, constituting so remarkable a specimen of deviation, that we made arrangements to have its history, together with a portrait, furnished for the Journal.

Anniversary at Union College.—At the approaching annual commencement of Union College, the alumni are invited to meet at Schenectady to celebrate the fiftieth year of Dr. Nott's presidency. It is anticipated that there will be a very large gathering.

We are requested to notice, as of especial interest to some of our readers, that there will be a meeting of the medical gentlemen assembled on that occasion. The hour and place of this meeting will be announced on Tuesday before the commencement.

Preventives and Treatment of Cholera.—"Dr. J. P. Hobbs, of Memphis, has addressed a letter to the Mayor of Nashville, in which he states that by the use of cistern water entirely and exclusively, the cholera will disappear and never return. The doctor says that this is known to him by analysis, and by an experience of twenty-four years. The editor of the Nashville Gazette says, that from his own observation in the year 1849, when the cholera was in its first stages, it was admitted by those best ac-

quainted with the disease, that those who used rain-water where the disease was most prevalent, were free from it."

The above is copied from a newspaper. There can be no doubt that soft pure rain-water is far preferable, as a drink, to the hard spring water which percolates through lime-stone. It is no unfrequent occurrence, however, when an epidemic is apprehended in large cities or populous towns, for the authorities to receive from various sources "sure preventives," or formulæ which are said to be "*infallible cures*." No doubt they are often sent from the best of motives; but many of the prescriptions are so incongruous and antagonistic in their application and mode of action, that we feel inclined to caution all persons from placing any reliance upon them, when they or their friends are attacked with cholera. We have seen letters to the Mayor of our city, strongly recommending certain treatment, said to be infallible, but which, unfortunately, consisted of the use of old and unsuccessfully-tried remedies, and could be of no possible use, but on the contrary might do much harm. We would repeat what has already been said in previous numbers of the Journal, that the safest course to pursue for those who have symptoms of cholera, is to send for a competent physician at once, and not depend on remedies which are vaunted forth in the papers, or which some friend strongly recommends.

Death of Dr. W. J. Burnett.—Most of our readers are well acquainted with the name and character of Dr. Waldo J. Burnett, of this city. His articles in this Journal on the influence of climate upon consumptive complaints, have been extensively read and highly prized. He was also taking a high stand among scientific men as a naturalist, and was most enthusiastic and active in the prosecution of whatever he undertook. He has departed from us at the early age of 26. The disease of which he died was consumption—a disease which was too early and too deeply seated for his repeated visits to the South to do more than temporarily relieve. Those visits were the means of making him known in various parts of the country, and many at a distance will hear of his premature death with feelings of sorrow.

Medical Miscellany.—Dr. Michael O'Hara has been appointed a surgeon in the United States Navy.—Hydrophobia is still occasionally exciting commotion in various parts of the country. There has evidently been a tendency to its development throughout the northern States, the present season.—Accounts of the prevalence of smallpox are constantly coming in.

PAMPHLETS RECEIVED.—The Transactions of the Iowa State Medical and Chirurgical Society, third and fourth sessions, held at Fairfield in 1852, and at Davenport in 1853.—Annual Catalogue and Announcement of the Medical Department of the St. Louis University, session 1854-55.—The Thirtieth Annual Report of the officers of the Retreat for the Insane at Hartford, Conn., 1854.

MARRIED.—In Pittsfield, Mass., Dr. G. H. Huntington, to Miss A. Henderson

Deaths in Boston for the week ending Saturday noon, July 2d, 86. Males, 52—females, 34. Abscess, 1—accident, 4—apoplexy, 1—inflammation of the brain, 1—congestion of the brain, 1—consumption, 9—convulsions, 5—cholera, 16—cholera morbus, 2—croup, 1—colic, 1—dysentery, 1—diarrhoea, 3—dropsy in the head, 5—infantile diseases, 1—puerperal, 1—erysipelas, 1—typhus fever, 1—typhoid fever, 1—scarlet fever, 1—disease of the heart, 2—haemorrhage of the lungs, 1—haemorrhage of the bowels, 1—inflammation of the lungs, 9—lock jaw, 1—marasmus, 2—measles, 1—old age, 3—pleurisy, 1—sore-throat, 1—syphilis, 1—smallpox, 1—suffocation, 1—teething, 2—thrush, 1—unknown, 1.

Under 5 years, 31—between 5 and 20 years, 6—between 20 and 40 years, 32—between 40 and 60 years, 7—above 60 years, 10. Born in the United States, 47—Ireland, 33—British Provinces, 1—England, 3—Scotland, 1—Africa, 1.

Massachusetts College of Pharmacy.—The proceedings of this College at the annual meeting in March, with the code of ethics and list of members, has been received. It affords us much pleasure to learn that it is in a highly prosperous condition, and bids fair to exceed, in usefulness, the most sanguine expectations of its early friends and projectors. The meetings have, since its organization, been characterized by harmonious feeling among its members, and have evinced a determined spirit on the part of the government, that it shall be an institution that will elevate the character of the pharmacist in Massachusetts.

The code of ethics which has been adopted, is that drawn up by the American Pharmaceutical Association. It is high-toned, practical, and embodies sentiments well calculated, if adhered to by the members, to produce desirable results. If sufficient encouragement is given by members, to warrant the Trustees in appointing a course of lectures the coming autumn, they have power to do so. It is hoped they may be enabled to do it, as we are of opinion that this is one of the great means of advancing the usefulness and character of the institution. The report of the Committee appointed by the Trustees, shows the college to be under excellent management. The closing part of the report must commend itself, not only to apothecaries, but also to the physician who depends upon them for medicinal preparations. It is as follows :—

“We should aim to be the organ of communication between the government and the people—between the government and the dealers in drugs; to form a repository of statistics, and a record of all things pertaining to medicine as relating to science and art; to educate our assistants, and make them adepts in the business; to collect a cabinet of all things that may be useful as standards and for comparison; to fix standards of quality; to diffuse a general information of all things pertaining to the business to those engaged in it; to collect a library worthy of the name, for information and reference, on all subjects connected with the profession; and, generally, to create an interest and elevate the standard of pharmacy, as well throughout the country as within our own body.

“Although it may seem against the interest of our better educated apothecaries, to assist their less favored competitors to the means of getting a better pharmaceutical education, to divide or make common stock of any peculiar improvement in the art they may have, we hold it a duty to humanity to do the best in our power to repress the abuses in the preparation and dispensing of medicine; to place the means of obtaining a liberal pharmaceutical education before the rising pharmacutists of our country; to cultivate a taste for scientific investigation in our art, promote concert of action, demand a higher grade of quality in our imported drugs, and to promote a greater degree of excellence and uniformity in our preparations.”

New Respirator.—Dr. Stenhouse described a new species of respirator, filled with powdered animal charcoal, to absorb and destroy any miasmata or infectious particles present in the air, in the case of fever and cholera hospitals, and of districts infected by ague, yellow fever, and similar diseases; it included the nostrils as well as the mouth. Repeated trials with it had shown that certain noxious and offensive gases, such as ammonia, sulphuretted hydrogen, and hydrosulphate of ammonia had been rapidly oxidated and destroyed in their passage through the pores of the charcoal.—*Report of the Society of Arts—London Athenæum.*